State of California
Department of Food and Agriculture
Division of Measurement Standards

Certificate Number: 5416-04

California Type Evaluation Program
Certificate of Approval
for Weighing and Measuring Devices

For:

Electric Watthour Meter
Electronic
Models: ECE 2000, MMP 6 and MMP 14
Generic Name: ENER-COMM™
Class: 200 (200 Amps Max.)
TA: 30 Amps

Submitted by:

Global Power Products
225 Arnold Road
Lawrenceville, GA 30044
Tel: (770) 736-8232
Fax: (770) 736-8231
Contact: Mark Matyac
Internet: www.globalpowerproducts.com

Standard Features and Options

Voltage Rating: 120/208/240 VAC

Model Designation:

Current Transformers (CT's):

GPP part number 512137-001 (black in color, closed loop style), accuracy class 0.3, rating 200:0.1A
GPP part number 512274-011 (black and green in color, split loop style), accuracy class 0.3, rating 200:0.1A

Liquid Crystal Display (LCD) Register:

LCD is attached with a ribbon cable and plastic clips.

Options:

The ECE 2000 model comes in 2 different enclosure styles and are surface mount meters.
The multi-meter panel (MMP 6 and MMP 14) models house 6 or 14 separate meters in one box respectively.

This device was evaluated under the California Type Evaluation Program (CTEP) and was found to comply with the applicable technical requirements of California Code of Regulations for "Weighing and Measuring Devices." Evaluation results and device characteristics necessary for inspection and use in commerce are on the following pages.

Effective Date: December 22, 2004

Mike Cleary, Director

Global Power Products
Electric Watthour Meter
Models: ECE 2000, MMP 6 and MMP 14

Application: For use as a watthour metering system in legally sub-metered electric service applications.

Identification: On the Model ECE 2000 and Models MMP 6 and MMP 14 watthour meters, the identification label is applied to the face of the meter enclosure. A supplemental label is applied to the side of the meter enclosure.

Sealing: On the Model ECE 2000 and Models MMP 6 and MMP 14, a wire security seal may be applied to the meter case and lid on both types of meters. There are no mechanical metrologically adjustable components in the meter.

On the Models MMP 6 and MMP14, an additional wire security seal may be applied to each individual slot position to seal each PCB meter to the 6 or 14 individual slot positions (see picture on page 3).

Operation: The "TEST LED" provides a visual display of KWh usage, with a pulse rate (Kt) of 7.2 (i.e., one on/off cycle is 7.2 watthours). On the display, "error 7000" means a CT direction is reversed or cross phased.

The terminals labeled "1" (line 1) and "4" (neutral) are the AC voltage supply terminals for 120 VAC. The terminals labeled "1" (black CT wire) and "2" (white CT wire) are the CT terminals for a single element (2-wire meter). The terminals labeled "3" (line 2) and "5" (black CT wire) and "6" (white CT wire) are used for the 208/240 VAC supply and dual element (3-wire meter). The locations for the voltage and CT's are not the same for the two different models (see the pictures of the locations on page 3).

The ENER-COMM™ meter will go into a test mode when a magnet is placed near the LCD. It will display the voltage and current from each phase of the meter.

Meter must be mounted in a NEMA enclosure appropriate for the location to insure a dry environment for the electronic module.

Test Conditions: Samples of each model meter and current transformers were submitted for evaluation. The meters were initially tested at the Division of Measurement Standards (DMS) lab. The meters were then sealed and installed at a field location. After a permanence period of approximately 30 days the meters were returned to DMS lab for retesting. The meters were subjected to a combined total of over 210 tests from 3 amps to 50 amps at both unity and 0.5 power factors.

Results of the evaluation indicate the devices comply with applicable requirements.

Type Evaluation Criteria Used: Title 4, California Code of Regulations, 2004 Edition

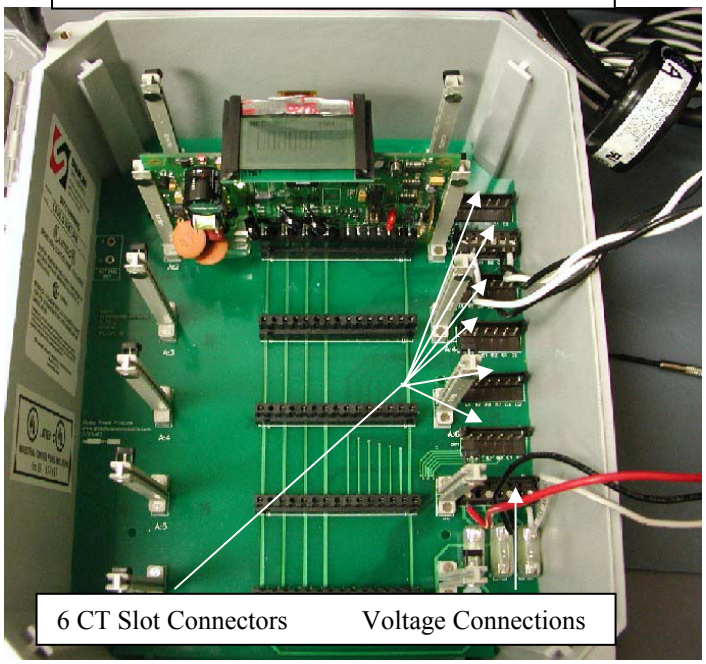
Tested By: John Roach (CA)

Split loop style black CT
GPP part number 512274-011
White dots is line side

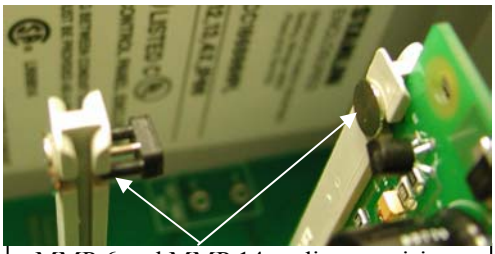
Closed loop style black CT
GPP part number 512137-001
White dot is line side

Global Power Products
Electric Watthour Meter
Models: ECE 2000, MMP 6 and MMP 14

Multi-Meter Panel (MMP 6)
6 slots, 6 PCB meters, 6 sets of CT's with 1 box and 1 voltage supply location.
(Pictured is 1 meter PCB is in slot #2)

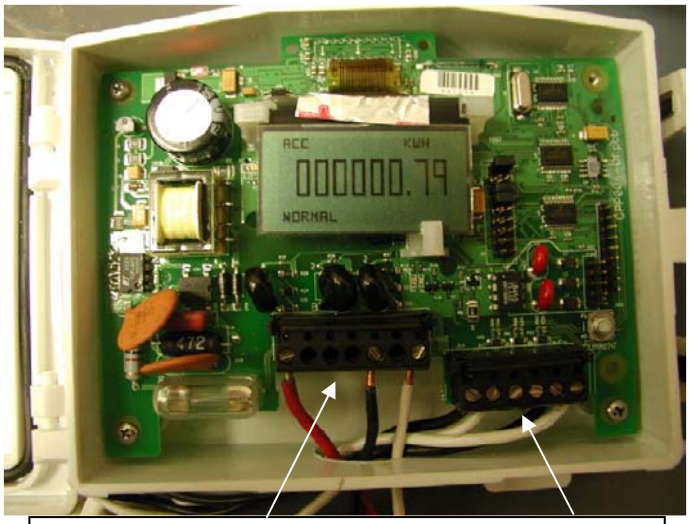


6 CT Slot Connectors Voltage Connections

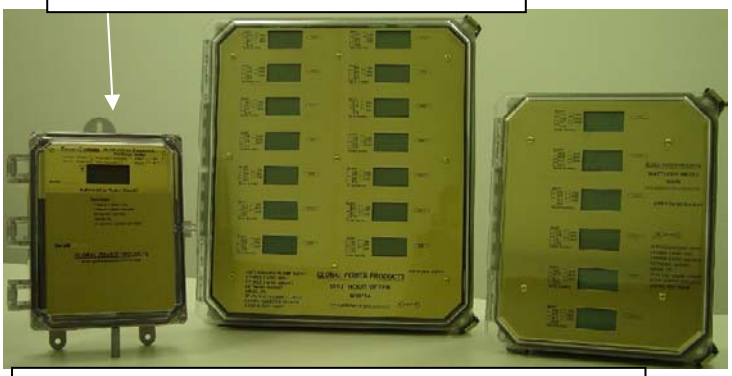


MMP 6 and MMP 14 sealing provisions

Both ECE 2000 model enclosure styles



ECE 2000 Voltage Connections CT Connections



ECE 2000 MMP 14 MMP 6